

## SEQUENCE LISTING

<110> Merck & Co., Inc.  
Xia, Menghang  
Williams, Mark E.

<120> Nucleic Acid Molecules Encoding Novel  
Human Low-Voltage Activated Calcium Channel Proteins,  
Designated - Alpha 1I-1 and Alpha 1I-2, Encoded Proteins and  
Methods of Use Thereof

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Asn Tyr Val Leu Phe	Asn Leu Leu Val	Ala Ile Leu Val Glu Gly Phe
835	840	845
Gln Ala Glu Gly Asp	Ala Asn Arg Ser Tyr	Ser Asp Glu Asp Gln Ser
850	855	860
Ser Ser Asn Ile Glu	Glu Phe Asp Lys Leu	Gln Glu Gly Leu Asp Ser
865	870	875
Ser Gly Asp Pro Lys	Leu Cys Pro Ile Pro	Met Thr Pro Asn Gly His
885	890	895
Leu Asp Pro Ser Leu	Pro Leu Gly Gly His	Leu Gly Pro Ala Gly Ala
900	905	910
Ala Gly Pro Ala Pro	Arg Leu Ser Leu Gln	Pro Asp Pro Met Leu Val
915	920	925
Ala Leu Gly Ser Arg	Lys Ser Ser Val Met	Ser Leu Gly Arg Met Ser
930	935	940
Tyr Asp Gln Arg Ser	Leu Ser Ser Ser Arg	Ser Ser Tyr Tyr Gly Pro
945	950	955
Trp Gly Arg Ser Ala	Ala Trp Ala Ser Arg	Arg Ser Ser Trp Asn Ser
965	970	975
Leu Lys His Lys Pro	Pro Ser Ala Glu His	Glu Ser Leu Leu Ser Ala
980	985	990
Glu Arg Gly Gly Gly	Ala Arg Val Cys Glu	Val Ala Ala Asp Glu Gly
995	1000	1005
Pro Pro Arg Ala Ala	Pro Leu His Thr Pro	His Ala His His Val His
1010	1015	1020
His Gly Pro His Leu	Ala His Arg His Arg	His His Arg Arg Thr Leu
1025	1030	1035
Ser Leu Asp Asn Arg	Asp Ser Val Asp Leu	Ala Glu Leu Val Pro Ala
1045	1050	1055
Val Gly Ala His Pro	Arg Ala Ala Trp Arg	Ala Ala Gly Pro Ala Pro
1060	1065	1070
Gly His Glu Asp Cys	Asn Gly Arg Met Pro	Ser Ile Ala Lys Asp Val
1075	1080	1085
Phe Thr Lys Met Gly	Asp Arg Gly Asp Arg	Gly Glu Asp Glu Glu Glu
1090	1095	1100
Ile Asp Tyr Thr Leu	Cys Phe Arg Val Arg	Lys Met Ile Asp Val Tyr
1105	1110	1115
Lys Pro Asp Trp Cys	Glu Val Arg Glu Asp	Trp Ser Val Tyr Leu Phe
1125	1130	1135
Ser Pro Glu Asn Arg	Phe Arg Val Leu Cys	Gln Thr Ile Ile Ala His
1140	1145	1150
Lys Leu Phe Asp Tyr	Val Val Leu Ala Phe	Ile Phe Leu Asn Cys Ile
1155	1160	1165
Thr Ile Ala Leu Glu	Arg Pro Gln Ile Glu	Ala Gly Ser Thr Glu Arg
1170	1175	1180
Ile Phe Leu Thr Val	Ser Asn Tyr Ile Phe	Thr Ala Ile Phe Val Gly
1185	1190	1195
Glu Met Thr Leu Lys	Val Val Ser Leu Gly	Leu Tyr Phe Gly Glu Gln
1205	1210	1215
Ala Tyr Leu Arg Ser	Trp Asn Val Leu Asp	Gly Phe Leu Val Phe
1220	1225	1230
Val Ser Ile Ile Asp	Ile Val Val Ser Leu	Ala Ser Ala Gly Gly Ala
1235	1240	1245
Lys Ile Leu Gly Val	Leu Arg Val Leu Arg	Leu Leu Arg Thr Leu Arg
1250	1255	1260
Pro Leu Arg Val Ile	Ser Arg Ala Pro Gly	Leu Lys Leu Val Val Glu
1265	1270	1275
Thr Leu Ile Ser Ser	Leu Lys Pro Ile Gly	Asn Ile Val Leu Ile Cys



				1285					1290				1295		
Cys	Ala	Phe	Phe	Ile	Ile	Phe	Gly	Ile	Leu	Gly	Val	Gln	Leu	Phe	Lys
				1300					1305					1310	
Gly	Lys	Phe	Tyr	His	Cys	Leu	Gly	Val	Asp	Thr	Arg	Asn	Ile	Thr	Asn
				1315					1320					1325	
Arg	Ser	Asp	Cys	Met	Ala	Ala	Asn	Tyr	Arg	Trp	Val	His	His	Lys	Tyr
				1330					1335					1340	
Asn	Phe	Asp	Asn	Leu	Gly	Gln	Ala	Leu	Met	Ser	Leu	Phe	Val	Leu	Ala
				1345					1350					1355	
Ser	Lys	Asp	Gly	Trp	Val	Asn	Ile	Met	Tyr	Asn	Gly	Leu	Asp	Ala	Val
				1365					1370					1375	
Ala	Val	Asp	Gln	Gln	Pro	Val	Thr	Asn	His	Asn	Pro	Trp	Met	Leu	Leu
				1380					1385					1390	
Tyr	Phe	Ile	Ser	Phe	Leu	Leu	Ile	Val	Ser	Phe	Phe	Val	Leu	Asn	Met
				1395					1400					1405	
Phe	Val	Gly	Val	Val	Val	Glu	Asn	Phe	His	Lys	Cys	Arg	Gln	His	Gln
				1410					1415					1420	
Glu	Ala	Glu	Glu	Ala	Arg	Arg	Arg	Glu	Glu	Lys	Arg	Leu	Arg	Arg	Leu
				1425					1430					1435	
Glu	Lys	Lys	Arg	Arg	Lys	Ala	Gln	Arg	Leu	Pro	Tyr	Tyr	Ala	Thr	Tyr
				1445					1450					1455	
Cys	His	Thr	Arg	Leu	Leu	Ile	His	Ser	Met	Cys	Thr	Ser	His	Tyr	Leu
				1460					1465					1470	
Asp	Ile	Phe	Ile	Thr	Phe	Ile	Ile	Cys	Leu	Asn	Val	Val	Thr	Met	Ser
				1475					1480					1485	
Leu	Glu	His	Tyr	Asn	Gln	Pro	Thr	Ser	Leu	Glu	Thr	Ala	Leu	Lys	Tyr
				1490					1495					1500	
Cys	Asn	Tyr	Met	Phe	Thr	Thr	Val	Phe	Val	Leu	Glu	Ala	Val	Leu	Lys
				1505					1510					1515	
Leu	Val	Ala	Phe	Gly	Leu	Arg	Arg	Phe	Phe	Lys	Asp	Arg	Trp	Asn	Gln
				1525					1530					1535	
Leu	Asp	Leu	Ala	Ile	Val	Leu	Leu	Ser	Val	Met	Gly	Ile	Thr	Leu	Glu
				1540					1545					1550	
Glu	Ile	Glu	Ile	Asn	Ala	Ala	Leu	Pro	Ile	Asn	Pro	Thr	Ile	Ile	Arg
				1555					1560					1565	
Ile	Met	Arg	Val	Leu	Arg	Ile	Ala	Arg	Val	Leu	Lys	Leu	Leu	Lys	Met
				1570					1575					1580	
Ala	Thr	Gly	Met	Arg	Ala	Leu	Leu	Asp	Thr	Val	Val	Gln	Ala	Leu	Pro
				1585					1590					1595	
Gln	Val	Gly	Asn	Leu	Gly	Leu	Leu	Phe	Met	Leu	Leu	Phe	Phe	Ile	Tyr
				1605					1610					1615	
Ala	Ala	Leu	Gly	Val	Glu	Leu	Phe	Gly	Lys	Leu	Val	Cys	Asn	Asp	Glu
				1620					1625					1630	
Asn	Pro	Cys	Glu	Gly	Met	Ser	Arg	His	Ala	Thr	Phe	Glu	Asn	Phe	Gly
				1635					1640					1645	
Met	Ala	Phe	Leu	Thr	Leu	Phe	Gln	Val	Ser	Thr	Gly	Asp	Asn	Trp	Asn
				1650					1655					1660	
Gly	Ile	Met	Lys	Asp	Thr	Leu	Arg	Asp	Cys	Thr	His	Asp	Glu	Arg	Ser
				1665					1670					1675	
Cys	Leu	Ser	Ser	Leu	Gln	Phe	Val	Ser	Pro	Leu	Tyr	Phe	Val	Ser	Phe
				1685					1690					1695	
Val	Leu	Thr	Ala	Gln	Phe	Val	Leu	Ile	Asn	Val	Val	Val	Ala	Val	Leu
				1700					1705					1710	
Met	Lys	His	Leu	Asp	Asp	Ser	Asn	Lys	Glu	Ala	Gln	Glu	Asp	Ala	Glu
				1715					1720					1725	
Met	Asp	Ala	Glu	Leu	Glu	Leu	Glu	Met	Ala	His	Gly	Leu	Gly	Pro	Gly
				1730					1735					1740	
Pro	Arg	Leu	Pro	Thr	Gly	Ser	Pro	Gly	Ala	Pro	Gly	Arg	Gly	Pro	Gly
				1745					1750					1755	
Gly	Ala	Gly	Gly	Gly	Gly	Asp	Thr	Glu	Gly	Gly	Leu	Cys	Arg	Arg	Cys
				1765					1770					1775	
Tyr	Ser	Pro	Ala	Gln	Glu	Asn	Leu	Trp	Leu	Asp	Ser	Val	Ser	Leu	Ile
				1780					1785					1790	
Ile	Lys	Asp	Ser	Leu	Glu	Gly	Glu	Leu	Thr	Ile	Ile	Asp	Asn	Leu	Ser

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